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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/942,427 | 08/29/2001 | Anthony L. Priborsky | 3123-369 | 7477 |

32093 7590 03/10/2004

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| EXAMINER |
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ELAMIN, ABDELMONIEM I

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| ART UNIT | PAPER NUMBER |
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2182

DATE MAILED: 03/10/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,427

Applicant(s)

PRIBORSKY, ANTHONY L.

Examiner

A I Elamin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 4 recites the limitation "said destination" in line 2. There is insufficient antecedent basis for this limitation in the claim.
3. Claim 27 recites the limitation "said controller memory" in line 6. There is insufficient antecedent basis for this limitation in the claim

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4, 6, 9-29 and 33-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Dye, US. Pat. No. 6,370,631.
6. Claims 1, 10, 15, 18, 20-26, Dye teaches, a method useable in a computer system having a host system memory, for increasing the data throughput performance of a memory controller, said memory controller being associated with controller memory [col. 22, lines 60-61], different from said host system memory [title, abstract], comprising;

receiving data from a source [*col. 22, line 66 thru col. 23, line 3*]; compressing said data [*col. 23, lines 4-5*];

storing said data in said controller memory [*col. 23, lines 6-10*];

reading said data from memory [*col. 23, lines 25-30*];

decompressing said data [*col. 23, lines 31-33*]; and

providing said data to a data consumer [*col. 23, lines 34-37*].

7. Claims 2-4, 16, 27-29 and 39-43, Dye teaches said data is received from said source at a first data rate and stored in said memory at a second data rate wherein said first data rate is greater than said second data rate, and providing said data to said consumer at a third rate greater than second rate [*col. 21, lines 55-63*].

8. Claims 6, 17, Dye teaches compression/decompression performed by at least on microcode and firmware running on a programmable microprocessor [*abstract*].

9. Claim 9, Dye teaches compressing said decompressed data from said memory to a temporary buffer [*Fig. 5*].

10. Claim 11, Dye teaches said data source comprises at least one of a host computer, a host memory, and a peripheral device [*abstract, col. 22, line 57 thru col. 23, line 37*].

11. Claim 12, Dye teaches said data consumer comprises at least one of a host computer, a host memory, and a peripheral device [*abstract, col. 22, line 57 thru col. 23, line 37*].

12. Claims 13-14, Dye teaches said data is received from said source by a first interface, and wherein said data is provided to said data consumer by a second interface [*Figs. 2 and 5*].

13. Claim 19, Dye teaches said storage comprises a hard drive [*abstract*].

14. Claim 33, Dye teaches said memory comprises a DRAM [*col. 14, lines 1-5*].

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15. Claim 34, Dye teaches said first interface is interconnected to a host computer [*Figs. 2 and 5*].
16. Claims 35-36, Dye teaches said second interface is interconnected to a first data storage device [*Figs. 2 and 5*].
17. Claim 37, Dye teaches said memory controller is implemented within a controller of a data storage device [*Fig. 2*].
18. Claim 38, Dye teaches said data storage device is a hard disk drive [*abstract*].

Claim Rejections - 35 USC § 103

- 19 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 5, 7-8, 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dye, US. Pat. No. 6,370,631.
21. Claims 5, 7-8, 30-32, Dye fails to teach said compression/decompression performed by an ASIC.

Official Notice is taken that both the concept and the advantages of ASICs are old and well known in the art.


It would have been obvious to modify Dye to include an ASIC, because ASICs provide a number of significant advantages over other types of integrated circuits, including more manageable die size, lower piece-part cost, higher performance, and more reliable design flow.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A I Elamin whose telephone number is (703)305-3804. The examiner can normally be reached on MON-FRI 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (703) 308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



A. ELAMIN
PRIMARY EXAMINER

A I Elamin
Primary Examiner
Art Unit 2182

March 8, 2004